UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE STUDY PLAN

Study ID code CAPMC-T-0426-RA

Title Templeton rangeland species and seeding establishment

trial

National Project No. Rangeland 1.1

Study TypeAEStudy statusActive

Location Templeton

Study Leaders Karl Striby, Templeton FO and David Dyer, CAPMC

Duration 2002 - 2008

Cooperators NRCS field office, Pritchard ranch, UC Coop. Ex.,

RCD

Land Use Rangeland

Vegetative Practices Primary 550 Range planting

Secondary 512 Pasture and hay planting

Resource concerns Resource Consideration/Problem

Animals Grazing land conservation
Soil Carbon sequestration
Plants Invasive species

Long Range Plan Study falls under Section IV, Part 1 and 4 of the CA PM

LRP

Description Determine best cultivar and establishment methods for

range plantings in the Templeton area and update the

vegetative guide for use in farm bill programs.

Status of Knowledge Improved plant materials are in limited existence for the

stated conservation practices and high performing both native and introduced species are needed. Current

establishment methods have limited effectiveness and new

methods and timing must be studied.

Experimental Design RCB Design, three replications, four locations

Treatment 1 Title: No-tilled, fall seeded

Description: Above plus weed control methods

Materials and Methods Samples of seed assembled form PMC collections. Seed

will be assembled in 2004. A total of 4 acres will be seeded to plots in four locations. 25 PLS per sq. foot, evaluate plots for vigor, stand establishment, height, forage, etc. No-till drill used for planting. Round-up will be applied before planting to kill annual grasses and weeds. Additional pre-emergent and post-emergent herbicides will be applied for annual grass and weed control. Species list

is attached.

Final Evaluations After initial evaluations, continue to evaluate for stand

persistence and weed control

Technology Transfer

Products

Revise FOTG standards, TechNote

Literature Cited There is a need for high performance adapted rangeland

species and establish methods for use in the range planting conservation practice in the Templeton area. Successful conversion from an annual grass weed systems to a perennial grass system with few weeds has proven to be difficult and new establishment methods are needed.

Keywords Rangeland, establishment methods, native grass

Review by: CA. State Plant Materials Committee **Approvals:** As per approval of CAPMC Business Plan